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LISTING OF THE CLAIMS

1           1. (Original) A method for detecting presence of a  
2 user at a telecommunication terminal, comprising the steps of:  
3           testing acoustic paths communicating audio  
4 information from and back to the telecommunication terminal;  
5 and  
6           determining the presence of the user based on  
7 changes in the acoustic paths.

1           2. (Original) The method of claim 1 wherein the step  
2 of testing comprises the steps of forming a model of the  
3 acoustic paths;  
4           detecting modifications in the acoustic paths to update  
5 the model of the acoustic paths; and  
6           the step of determining comprises the step of using  
7 the detected modifications to determine changes in the acoustic  
8 paths.

1           3. (Original) The method of claim 2 wherein the step  
2 of detecting comprises the steps of applying audio information  
3 transmitted from the telecommunication terminal to the model of  
4 the acoustic paths;

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5 receiving the transmitted audio information back by  
6 the telecommunication terminal via the acoustic paths;  
7 determining a difference between an output of the  
8 model of acoustic paths from the received audio information;  
9 and  
10 calculating a correction to the model of the acoustic  
11 paths using the difference and transmitted audio information.

1 4. (Original) The method of claim 1 wherein the audio  
2 information is at one of within human hearing, above human  
3 hearing and below human hearing.

1 5. (Original) The method of claim 1 wherein the step  
2 of determining the presence comprises the steps of developing  
3 the model of the acoustic paths with the user presence and not  
4 presence at the telecommunication terminal; and

5 calculating a threshold of changes in the model of the  
6 acoustic paths that represents the presence or non-presence of  
7 the user at the telecommunication terminal.

1 6. (Canceled)

1 7. (Canceled)

1 8. (Canceled)

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1           9. (Original) An apparatus for detecting presence of a  
2 user at a telecommunication terminal, comprising:  
3           a transmitter for transmitting audio information;  
4           a receiver for receiving the transmitted audio  
5 information via acoustic paths;  
6           a model of the acoustic paths for using the audio  
7 information before transmission and for producing an audio  
8 output;  
9           a comparator for determining a difference between the  
10 audio output and received audio information;  
11           a modifier for iteratively generating modifications for  
12 the model of the acoustic paths in responsive to the difference  
13 and audio information before transmission; and  
14           a controller responsive to the modifications for  
15 deflecting the presence or non-presence of the user at the  
16 telecommunication terminal.

1           10. (Original) The apparatus of claim 9 wherein the  
2 controller further configured for determining modifications when  
3 the user is presence and when the user is not presence; and  
4           the controller calculating a threshold from the  
5 determined modifications indicating the presence or non-  
6 presence of the user.

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1           11. (Original) The apparatus of claim 9 wherein the  
2       audio information is at one of within human hearing, above  
3       human hearing and below human hearing.

1           12. (Original) The apparatus of claim 11 wherein the  
2       type of the audio information is controlled by the controller.

1           13. (Original) An apparatus for detecting presence of  
2       a user at a telecommunication terminal, comprising:  
3               an echo canceller for canceling echoes caused by  
4       acoustic paths to audio information from and back to the echo  
5       canceller; and  
6               a controller responsive to changes in the echo  
7       canceller for determining the presence and non-presence of the  
8       user at the telecommunication terminal.

1           14. (Original) The apparatus of claim 13 wherein the  
2       audio information is at one of within human hearing, above  
3       human hearing and below human hearing.

1           15. (Original) The apparatus of claim 14 wherein the  
2       type of the audio information is controlled by the controller.

1           16. (Original) The apparatus of claim 13 wherein the  
2       echo canceller comprises a model of the acoustic paths;

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3           a modifier for generating modifications to the model  
4    based on changes to the acoustic paths; and  
5           the controller responsive to the generated  
6    modifications for determining the presence or non-presence of  
7    the user at the telecommunication terminal.

1           17. (Original) The apparatus of claim 16 wherein the  
2    modifier responsive to a difference in an output of the model of  
3    the acoustic paths to audio information before transmission  
4    from the echo canceller and received audio information via the  
5    acoustic paths for generating the modification based on the  
6    difference and the audio information before transmission.

1           18. (Previously Amended) An apparatus A method  
2    for determining presence of a user at a telecommunication  
3    terminal, comprising:

4           an echo detector for detecting echoes caused by  
5    acoustic paths to audio information from an echo detector and  
6    back to the echo detector by the echo detector; and  
7           a controller responsive to changes in the echo  
8           detector for determining in response to changes in the echo  
9           detector by a controller the presence and non-presence of the  
10   user at the telecommunication terminal.

1           19. (Previously Amended) The apparatus method of  
2    claim 18 wherein the audio information is at one of within

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3 human hearing, above human hearing and below human  
4 hearing.

1 20. (Previously Amended) The apparatus method  
2 claim 19 wherein the type of the audio information is controlled  
3 by the controller.

1 21. (Previously Amended) The apparatus method of  
2 claim 18 wherein the echo detector comprises a model of the  
3 acoustic paths;

4 a modifier for generating modifications to the model  
5 based on changes to the acoustic paths by a modifier; and  
6 the controller responsive to the generated  
7 modifications for determining in response to the generated  
8 modifications by the controller the presence or non-presence of  
9 the user at the telecommunication terminal.

1 22. (Previously Amended) The apparatus method of  
2 claim 21 wherein the modifier responsive to a difference in an  
3 output of the model of the acoustic paths to audio information  
4 before transmission from the echo detector and received audio  
5 information via the acoustic paths for generating the  
6 modification based on the difference and the audio information  
7 before transmission.

1 23. (Canceled)

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- 1 24. (Canceled)
- 1 25. (Canceled)
- 1 26. (Canceled)
- 1 27. (Canceled)
- 1 28. (Canceled)
- 1 29. (Canceled)
- 1 30. (Canceled)
- 1 31. (Canceled)
- 1 32. (Canceled)
- 1 33. (Canceled)
- 1 34. (Canceled)
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37. (Cancelled)

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